Complete Summary

GUIDELINE TITLE

Practice parameter: the role of corticosteroids in the management of acute monosymptomatic optic neuritis. Report of the Quality Standards Subcommittee of the American Academy of Neurology.

BIBLIOGRAPHIC SOURCE(S)

Kaufman DI, Trobe JD, Eggenberger ER, Whitaker JN. Practice parameter: the role of corticosteroids in the management of acute monosymptomatic optic neuritis. Report of the Quality Standards Subcommittee of the American Academy of Neurology. Neurology 2000 Jun 13;54(11):2039-44. [91 references]

COMPLETE SUMMARY CONTENT

SCOPE

DISEASE/CONDITION(S)

Acute monosymptomatic optic neuritis, particularly idiopathic or multiple sclerosis-related optic neuritis

GUIDELINE CATEGORY

Assessment of Therapeutic Effectiveness
Management
Treatment

CLINICAL SPECIALTY

Neurology
Ophthalmology

INTENDED USERS

Physicians

GUIDELINE OBJECTIVE(S)

To provide recommendations regarding the use of corticosteroids in the management of acute monosymptomatic optic neuritis

TARGET POPULATION

Patients with acute monosymptomatic optic neuritis, particularly idiopathic or multiple sclerosis-related optic neuritis

INTERVENTIONS AND PRACTICES CONSIDERED

1. Oral prednisone
2. High dose oral or parenteral (intravenous) methylprednisolone
3. High dose oral or parenteral (intravenous, intramuscular) corticotrophin (ACTH)

MAJOR OUTCOMES CONSIDERED

- Speed and level of recovery
- Complications of therapy
- Therapeutic effect, as measured by visual acuity, visual fields, contrast sensitivity, and color vision
- Recurrence of optic neuritis
- Relative risk of developing multiple sclerosis after optic neuritis

METHODOLOGY

METHODS USED TO COLLECT/SELECT EVIDENCE

Hand-searches of Published Literature (Secondary Sources)
Searches of Electronic Databases

DESCRIPTION OF METHODS USED TO COLLECT/SELECT THE EVIDENCE

A literature search was conducted using Medline and Healthstar from 1966 to July 1, 1999. Optic neuritis was cross-referenced with treatment and therapy. Citations earlier than 1966 were searched by cross-referencing techniques and an Index Medicus hand search. A total of 582 different citations dealing with optic neuritis and some aspect of therapy were identified and reviewed. Only literature published in well-disseminated journals dealing specifically with multiple sclerosis-related or idiopathic optic neuritis involving at least three patients was retained. Both retrospective and prospective data were reviewed. Citations were excluded when they simply described a small number of individual case reports or reviewed "optic neuritis" due to diseases such as sarcoid, lupus, anterior ischemic optic neuropathy, trauma, hereditary optic neuropathy, optic nerve compression, or other unrelated optic neuropathy.

NUMBER OF SOURCE DOCUMENTS

582

METHODS USED TO ASSESS THE QUALITY AND STRENGTH OF THE EVIDENCE

Weighting According to a Rating Scheme (Scheme Given)

RATING SCHEME FOR THE STRENGTH OF THE EVIDENCE

Definitions for the classification of evidence

Class I: Evidence provided by well-designed, randomized, controlled clinical trials, including overviews (meta-analyses) of such trials.

Class II: Evidence provided by well-designed observational studies with concurrent controls (e.g., case control and cohort studies).

Class III: Evidence provided by expert opinion, case series, case reports, and studies with historical controls.

METHODS USED TO ANALYZE THE EVIDENCE

Systematic Review with Evidence Tables

DESCRIPTION OF THE METHODS USED TO ANALYZE THE EVIDENCE

Not stated

METHODS USED TO FORMULATE THE RECOMMENDATIONS

Not stated

RATING SCHEME FOR THE STRENGTH OF THE RECOMMENDATIONS

Definitions for the strength of recommendations were based on the following criteria:

Standard: A principle for patient management that reflects a high degree of clinical certainty (usually this requires Class I evidence that directly addresses the clinical question, or overwhelming Class II evidence when circumstances preclude randomized clinical trials).

Guideline: A recommendation for patient management that reflects moderate clinical certainty (usually this requires Class II evidence or a strong consensus of Class III evidence.

Practice Option: A strategy for patient management for which the clinical utility is uncertain (inconclusive or conflicting evidence or opinion).

Practice Advisory: A practice recommendation for emerging and/or newly approved therapies or technologies based on evidence from at least one Class I study. The evidence may demonstrate only a modest statistical effect or limited (partial) clinical response, or significant cost– benefit questions may exist. Substantial (or potential) disagreement among practitioners or between payers and practitioners may exist.

COST ANALYSIS

A formal cost analysis was not performed and published cost analyses were not reviewed.

METHOD OF GUIDELINE VALIDATION

External Peer Review
Internal Peer Review

DESCRIPTION OF METHOD OF GUIDELINE VALIDATION

Numerous individuals, American Academy of Neurology (AAN) sections, and organizations reviewed drafts of this practice parameter, including the American Academy of Ophthalmology, National Multiple Sclerosis (MS) Society, Multiple Sclerosis Society of Canada, AB Baker Section, Government Services Section, Multiple Sclerosis Section, Neuro-Ophthalmology/Neuro-Otology Section, Neuroimaging Section, Pain Section, Sleep Section, Spine Section, and the Stroke Section.

The guideline was approved by the Quality Standards Subcommittee on July 24, 1999, by the Practice Committee on January 15, 2000, and the American Academy of Neurology Board of Directors on February 26, 2000.

RECOMMENDATIONS

MAJOR RECOMMENDATIONS

Each clinical recommendation is rated based on the strength of the evidence. Definitions of the strength of the management recommendations (standard, guideline, practice option, practice advisory) and quality of the evidence (Class I-Class III) are presented at the end of the Major Recommendations field.

Acute Monosymptomatic Optic Neuritis Clinical Recommendations

Oral prednisone in doses of 1 mg/kg/day has no demonstrated efficacy in the recovery of visual function in acute monosymptomatic optic neuritis, and therefore is of no proven value in treating this disorder. (Standard)

Higher dose oral or parenteral methylprednisolone or corticotrophin (ACTH) may hasten the speed and degree of recovery of visual function in persons with acute monosymptomatic optic neuritis. There is, however, no evidence of long-term benefit for visual function. The decision to use these medications to speed

recovery but not to improve ultimate visual outcome should therefore be based on other non-evidence–based factors such as quality of life, risk to the patient, visual function in the fellow eye, or other factors that the clinician deems appropriate. (Guideline)

Definitions:

Strength of recommendations

Standard: A principle for patient management that reflects a high degree of clinical certainty (usually this requires Class I evidence that directly addresses the clinical question, or overwhelming Class II evidence when circumstances preclude randomized clinical trials).

Guideline: A recommendation for patient management that reflects moderate clinical certainty (usually this requires Class II evidence or a strong consensus of Class III evidence.

Practice Option: A strategy for patient management for which the clinical utility is uncertain (inconclusive or conflicting evidence or opinion).

Practice Advisory: A practice recommendation for emerging and/or newly approved therapies or technologies based on evidence from at least one Class I study. The evidence may demonstrate only a modest statistical effect or limited (partial) clinical response, or significant cost– benefit questions may exist. Substantial (or potential) disagreement among practitioners or between payers and practitioners may exist.

Classification of evidence

Class I. Evidence provided by well-designed, randomized, controlled clinical trials, including overviews (meta-analyses) of such trials.

Class II. Evidence provided by well-designed observational studies with concurrent controls (e.g., case control and cohort studies).

Class III. Evidence provided by expert opinion, case series, case reports, and studies with historical controls.

CLINICAL ALGORITHM(S)

None provided

EVIDENCE SUPPORTING THE RECOMMENDATIONS

TYPE OF EVIDENCE SUPPORTING THE RECOMMENDATIONS

The type of supporting evidence is identified and graded for each recommendation (see "Major Recommendations").

BENEFITS/HARMS OF IMPLEMENTING THE GUIDELINE RECOMMENDATIONS

POTENTIAL BENEFITS

Higher dose oral and parenteral methylprednisolone or corticotrophin (ACTH) may hasten the speed and degree of recovery of visual function in persons with acute monosymptomatic optic neuritis. There is, however, no evidence of long-term benefit for visual function.

POTENTIAL HARMS

Risks associated with steroid use

QUALIFYING STATEMENTS

QUALIFYING STATEMENTS

This statement is provided as an educational service of the American Academy of Neurology. It is based on an assessment of current scientific and clinical information. It is not intended to include all possible proper methods of care for a particular neurologic problem or all legitimate criteria for choosing to use a specific procedure. Neither is it intended to exclude any reasonable alternative methodologies. The American Academy of Neurology recognizes that specific patient care decisions are the prerogative of the patient and the physician caring for the patient, based on all of the circumstances involved.

IMPLEMENTATION OF THE GUIDELINE

DESCRIPTION OF IMPLEMENTATION STRATEGY

An implementation strategy was not provided.

INSTITUTE OF MEDICINE (IOM) NATIONAL HEALTHCARE QUALITY REPORT CATEGORIES

IOM CARE NEED

Getting Better

IOM DOMAIN

Effectiveness
Safety

IDENTIFYING INFORMATION AND AVAILABILITY

BIBLIOGRAPHIC SOURCE(S)

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ADAPTATION

Not applicable: The guideline was not adapted from another source.

DATE RELEASED

2000 Jun

GUIDELINE DEVELOPER(S)

American Academy of Neurology - Medical Specialty Society

SOURCE(S) OF FUNDING

American Academy of Neurology (AAN)

GUIDELINE COMMITTEE

Quality Standards Subcommittee

COMPOSITION OF GROUP THAT AUTHORED THE GUIDELINE

Names of Committee Members: Gary Franklin, MD, MPH (Co-Chair); Catherine Zahn, MD (Co-Chair); Milton Alter, MD, PhD; Stephen Ashwal, MD; John Calverley, MD; Richard Dubinsky, MD; Jacqueline French, MD; Michael Greenberg, MD; Gary Gronseth, MD; Deborah Hirtz, MD; Robert Miller, MD; James Stevens, MD; and William Weiner, MD

FINANCIAL DISCLOSURES/CONFLICTS OF INTEREST

Not stated

GUIDELINE STATUS

This is the current release of the guideline.

GUIDELINE AVAILABILITY

Electronic copies: A list of American Academy of Neurology (AAN) guidelines, along with a link to a Portable Document Format (PDF) file for this guideline, is available at the AAN Web site.

Print copies: Available from the AAN Member Services Center, (800) 879-1960, or from AAN, 1080 Montreal Avenue, St. Paul, MN 55116.

AVAILABILITY OF COMPANION DOCUMENTS

- Practice statement definitions. St. Paul (MN): American Academy of Neurology.
- Practice statement development. St. Paul (MN): American Academy of Neurology.

PATIENT RESOURCES

None available

NGC STATUS

This summary was completed by ECRI on February 12, 2002. The information was verified by the guideline developer as of March 29, 2002.

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